

What does the phrase "cost of living" mean to you?

The amount of money needed to live in the modern world (shelter, food, utilities, clothing, pampering, education, indulgences, transportation, books, phone, Entertainment, cleanliness, Internet, B.C....)

What is a budget?

A plan to manage your spending to fit your income.

Unit 2: Cost of Living and Budget

3/25/15

Household Budget Exploration Project

Income

Expenses: Fixed, Variable

Graphs (3): Income, Fixed Expenses, Variable Expenses

Spreadsheet: Excel or Google Docs Spreadsheet

2.1 Types of Wages

3/25/15

IWBAT

- discuss types of wages and how to convert between the types.

I will capture my thinking using the math note catcher including teacher and student-team modeled example problems on the Promethean board. I will demonstrate my understanding on my exit ticket.

2.1 Types of Wages

3/25/15

Wages - What you get paid for your work

Hourly wage - How much you are paid for
one hour's work
8 hrs/day 40 hrs/wk

Salary - How much you get paid for a year
independent of the number of hours you
work each week

IWBAT types of wages and how to convert between the types.

2.1 Types of Wages

3/25/15

Overtime - usually 1.5x regular pay for every hour you work past full time (usually 40 hrs)

Converting from an hourly wage to annual salary:

Johnny makes \$9 per hour for the first 40 hours he works each week. If he works eight hours per day, six days per week for three weeks per month, what is his annual pay?

$$\begin{array}{r} 40 \times \$9 = \$360 \\ 8 \times 9 \times 1.5 = \$108 \\ \hline \$468 / \text{wk} \\ \times 3 \text{ wk} / \text{mo} \\ \hline \$1404 / \text{mo} \end{array} \quad \begin{array}{r} \$1404 / \text{mo} \\ \times 12 \text{ mo} \\ \hline \$16,848 / \text{yr} \end{array}$$

IWBAT types of wages and how to convert between the types.

2.1 Types of Wages

3/25/15

Converting from annual salary to an hourly wage:

Sonia has accepted a position which pays \$37,000 per year. If she averages 55 hours per week for 42 weeks per year, what is her effective hourly wage?

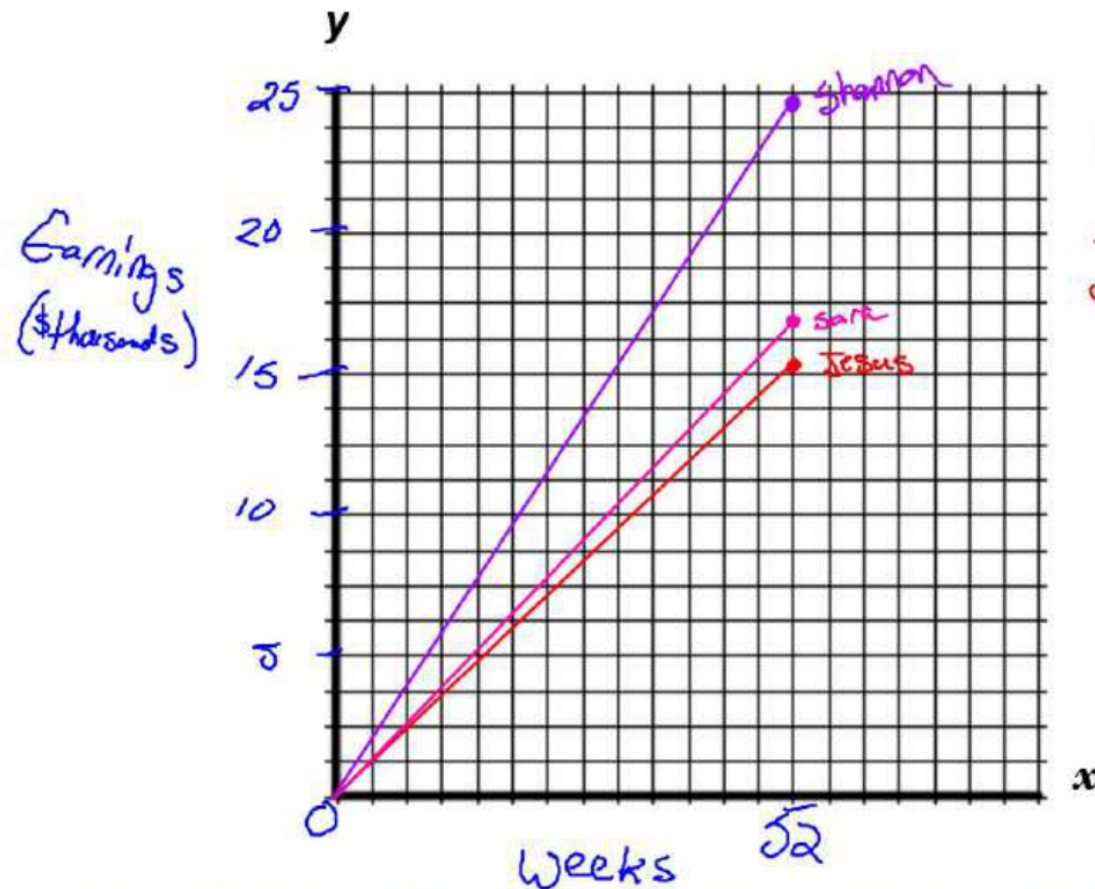
$$\begin{array}{r} \$ 37000/\text{yr} \\ \hline (55 \text{ h/wk} \cdot 42 \text{ wk/yr}) \\ \$ 26.01/\text{hr} \end{array}$$

IWBAT types of wages and how to convert between the types.

2.1 Types of Wages

3/26/15

Jesus is paid \$7.35/hr. Sara is paid \$8/hr. Shannon is paid \$12/hr. Plot their earnings over a year of 40 hr work weeks.



$$\text{Shannon } \frac{\$24960}{52}$$

$$y = \$480x$$

$$\text{Sara } y = \$320x$$

$$\text{Jesus } y = \$294x$$

IWBAT types of wages and how to convert between the types.

2.1 Types of Wages

3/26/15

Bonnie earns \$455 a week, and she works 5 days a week. What is her daily wage?

$$\frac{\$455}{5 \text{ days}} = \$91/\text{day}$$

Megumi earned a salary of \$39,312 last year. How much did she earn each month?

$$\frac{\$39,312}{12 \text{ mo}} = \$3,276/\text{mo}$$

IWBAT types of wages and how to convert between the types.

2.1 Types of Wages

3/26/15

After finishing his shift, a cashier wrote 2.25 under "hours worked" on his time card. How long did he work in hours and minutes?

Handwritten calculation showing the conversion of 2.25 hours to hours and minutes:

$$2.25 \text{ h}$$
$$2 \text{ h } 15 \text{ min}$$
$$.25 \times 60 \text{ min/h} = 15 \text{ min}$$

Arrows indicate the flow from the decimal part of the time to the minutes calculation and then to the final answer.

What is the rate of pay for the worker represented in this graph?



Handwritten calculation showing the rate of pay:

$$\text{\$15/hr}$$

IWBAT types of wages and how to convert between the types.

2.1 Types of Wages

3/26/15

Vocabulary: Appendix A.3 Key Terms

Practice: 2.1.2

Quiz 2.1.3

IWBAT types of wages and how to convert between the types.

2.2 Compensation Packages

3/27/15

What is compensation? What forms can it take?

How you are paid for
your work.

money
holiday paid
paid vacation/trip

2.2 Compensation Packages

2/11/15

Total Compensation

Salary + other benefits

Food

Vacations

holidays

Sporting events

expense account

insurance

Overtime pay

Retirement

Special rates

employee discount

Free product

technology
Company car
free travel
VIP

2.2 Compensation Packages

2/11/15

IWBAT

- discuss compensation packages,
- what may be included in one,
- how to calculate the value of a compensation package.

I will capture my thinking using the math note catcher including teacher and student-team modeled example problems on the Promethean board. I will demonstrate my understanding on my exit ticket.

2.2 Compensation Packages

3/26/15

Insurance

✓ Health

Car

✓ Life

Homeowner

Technology

Renters

Malpractice

✓ Workman's Compensation

✓ Vision

✓ Dental

Death + Dismemberment

Pet

Long Term Care

IWBAT discuss compensation packages, what may be included in one, and how to calculate the value of a compensation package.

2.2 Compensation Packages

3/26/15

Vacation

Hotels/Lodging

Holidays paid

Personal days

IWBAT discuss compensation packages, what may be included in one, and how to calculate the value of a compensation package.

2.2 Compensation Packages

3/26/15

Retirement

401(k)/403(b)

Pension

Employer contribution - employer puts money in

Matching contribution - employer puts money in only if you put money in (a small % of your contribution)

Contribution limits

IWBAT discuss compensation packages, what may be included in one, and how to calculate the value of a compensation package.

2.2 Compensation Packages

3/26/15

Total compensation

Salary + other benefits

An architect's compensation package includes the total cost of a \$250-per-month health insurance plan, the total cost of a \$35-per-month life insurance plan, and a salary of \$55,000 per year. What is the yearly value of the compensation package?

$$\begin{array}{r} \text{HI } \$250 \times 12 = \$3000 \\ \text{LI } \$35 \times 12 = \$420 \\ \text{Salary} \quad + \$55000 \\ \hline \$58,420 \end{array}$$

IWBAT discuss compensation packages, what may be included in one, and how to calculate the value of a compensation package.

2.2 Compensation Packages

3/26/15

What is the annual value of a 401(k) plan in which the employer agrees to match 2.5% up to \$15,000 if the employee contributes \$15,000?

$$\$15,000 + 0.025(15,000) = \$15,375$$

What is the true hourly wage of a job that pays \$17 per hour and allows 10 hours of paid time off for every 200 hours worked?

$$\frac{\$17(210)}{200} = \$17.85$$

IWBAT discuss compensation packages, what may be included in one, and how to calculate the value of a compensation package.

2.2 Compensation Packages

4/06/15

An assembly technician has weekends off and has 15 paid vacation days per year, including holidays that fall on weekdays. If her salary is \$63,700 per year, what is her pay per workday?

$$\begin{array}{r} 52 \times 2 = 104 \text{ weekends} \\ + 15 \text{ Paid vacation} \\ \hline 119 \text{ Days not worked} \\ 246 \text{ worked} \\ \hline \$63,700 \\ 246 \text{ days worked} = \$258.94/\text{work day} \end{array}$$

2.2 Compensation Packages

4/06/15

Setting up your budget project spreadsheet.

Example

Homework for Wednesday: Find your household budget expenditures (what they are and how much is spent) to be put into your spreadsheet at the beginning of class on Wednesday.

2.2 Compensation Packages

4/06/15

Vocabulary: Appendix A.3 Key Terms

Practice: 2.2.2

Quiz 2.2.3

IWBAT discuss compensation packages, what may be included in one, and how to calculate the value of a compensation package.

2.3 Piece Rate

4/08/15

Enter data about your household budget acquired over the last two days into your spreadsheet.

4/08/15

Practice Problems 2.2

Total Compensation \$120,000

1) Salary $\cdot 65 \cdot \$120,000 = \$78,000$

2) 401K $\cdot 12\% \cdot 120,000 = \$14,400$

3) Vacation $\cdot 0.026 \cdot 120,000 = \$3,120 / 10 = \$312$

4) Life $\cdot 0.02 \cdot 120,000 = \$2,400 / 12 = \$200$

5) Health $\cdot 18\% \cdot 120,000 = \$21,600 = .80H$
 $\$5,400 = .20H$

6) premium

7) daily wage

8) Mike Maurice

$$\frac{12 \times 8 \times 11}{10}$$

$$\frac{\$88}{8}$$

$$\$11/\text{hr}$$

$$\frac{12 \times 8 \times 11}{10}$$

$$\frac{\$105.60}{8}$$

$$\$13.20/\text{hr} = \$2.20$$

Practice Problems 2.2

4/08/15

A
9) 15% to \$2000
 $.15 \times 2000 = \$300$

10) Acme
\$40,000
20 vac
90% LI_{ns}
100% HI_{ns}

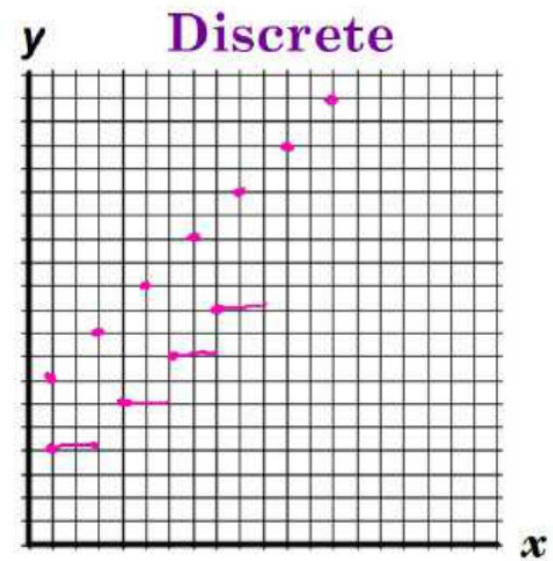
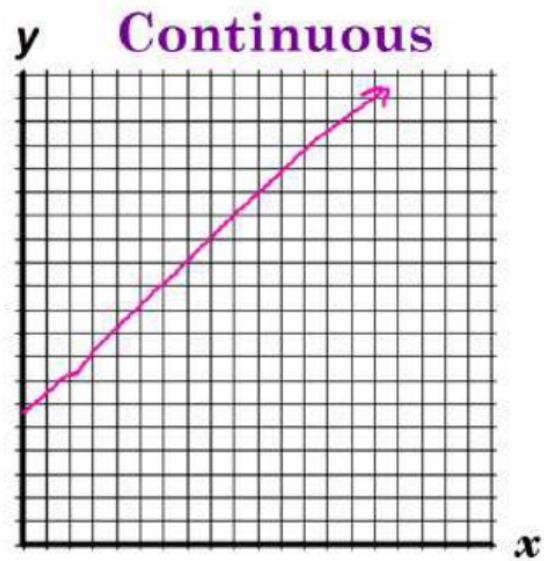
B
20% to \$1500
 $.20 \times 1500 = \$300$

Anvil
\$40,000
20 vac
90% LI_{ns}
NO HI_{ns}

2.3 Piece Rate

4/09/15

How is a discrete graph different from a continuous graph?



2.3 Piece Rate

4/09/15

What is piece rate?

How much you are paid per piece of work completed.

2.3 Piece Rate

4/09/15

IWBAT

- how to estimate hourly pay from piece rate
- model piece rates using scatter plots.

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2.3 Piece Rate

4/09/15

Cliff worked 9 hours yesterday, produced 28 units, and earned \$8.75 for each unit produced. Find Cliff's average hourly wage.

$$28 \times \$8.75 = \$245$$

$$\frac{\$245}{9 \text{ hr}} = \$27.22/\text{hr}$$

IWBAT how to estimate hourly pay from piece rate, and model piece rates using scatter plots.

2.3 Piece Rate

4/09/15

A property inspector gets paid \$350 for each property inspected. If it takes him 8 hours on average to inspect a property and he spends 48 hours each week inspecting properties, what is his average hourly wage?

$$\frac{\$350 \times 6}{48 = 8 \times 6} = \$43.75$$

$$48h / 8h/prop = 6prop.$$

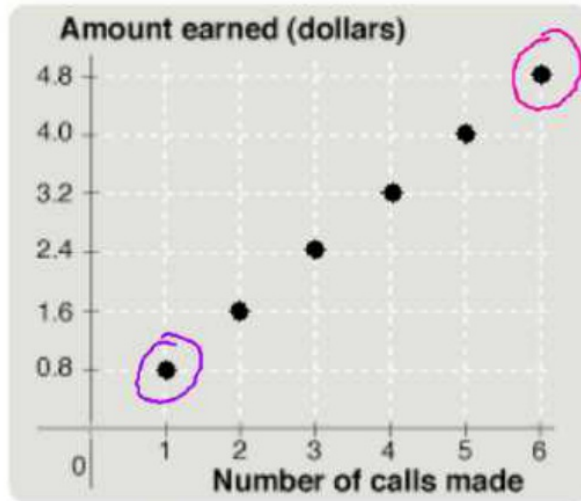
$$\frac{\$350/prop}{8h/prop} = \$43.75$$

IWBAT how to estimate hourly pay from piece rate, and model piece rates using scatter plots.

2.3 Piece Rate

4/09/15

A telemarketer earns a fixed amount for each call that he makes, as shown in the graph below. If the telemarketer makes 12 calls, how much will he earn in total?



$$\frac{6}{4.8} = \frac{12}{x} = 9.6$$

$$\frac{1}{0.8} = \frac{12}{x} = 9.6$$

\$9.60

Discrete
Scatter Plot

IWBAT how to estimate hourly pay from piece rate, and model piece rates using scatter plots.

2.3 Piece Rate

4/09/15

$$\begin{aligned}12x50 &= 25x \\40x &= 30x24 \\14x &= 28x30\end{aligned}$$

Vocabulary: Appendix A.3 Key Terms

Practice: 2.3.2

Quiz 2.3.3

IWBAT how to estimate hourly pay from piece rate, and model piece rates using scatter plots.

2.4 Linear Equations and Wages

4/10/15

What is a linear equation? What is the difference between a continuous graph and a discrete graph?

A linear equation is an equation with two variables which plots a straight line

Continuous graph - connects all the points w/o stopping (hourly pay)

Discrete graph - separate points, not connected (piece rate)

2.4 Linear Equations and Wages

4/10/15

What is the equation of a line whose y-intercept is not zero?

$$y = mx + b$$

↓
slope

↪ y-intercept

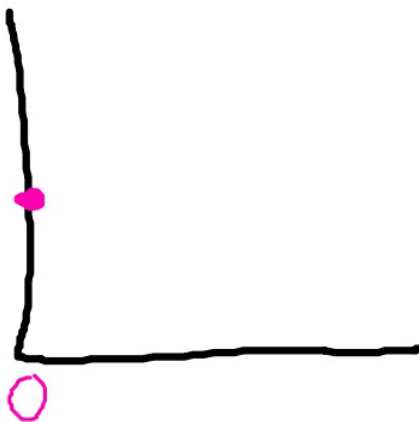
Review the general equation of a line and relate it to hourly wages.

m = hourly wage
or pay rate

y = total earnings (\$)

b = starting
bonus

x = time (hr)



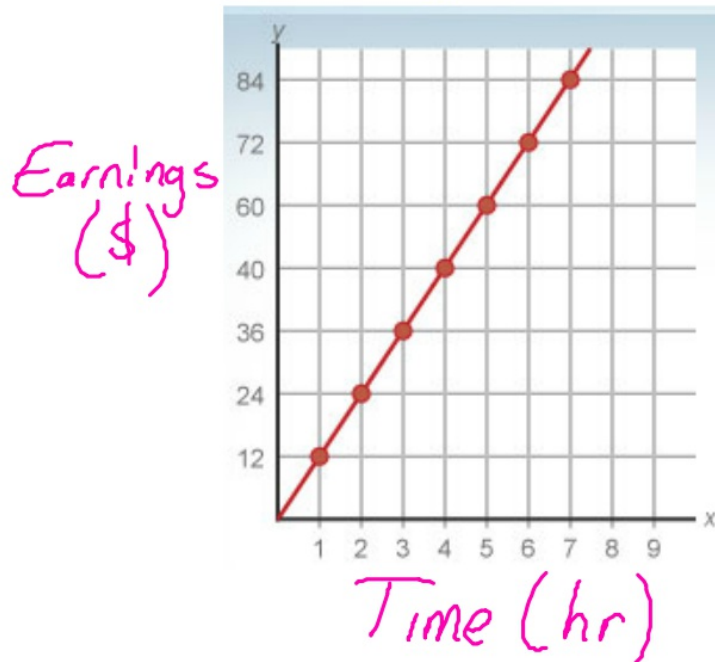
IWBAT

- model a salary that includes a starting bonus
- understand the y-intercept in a linear equation
- use piece-wise functions to model changes in salary
- explore the graphing function of a graphing calculator.

I will capture my thinking using the math note catcher including teacher and student-team modeled example problems on the Promethean board. I will demonstrate my understanding on my exit ticket.

2.4 Linear Equations and Wages

4/10/15



| x | y |
|---|------|
| 1 | \$12 |
| 2 | \$24 |
| 3 | \$36 |
| 4 | \$48 |
| 5 | \$60 |

$$y = mx + b$$
$$b = 0$$

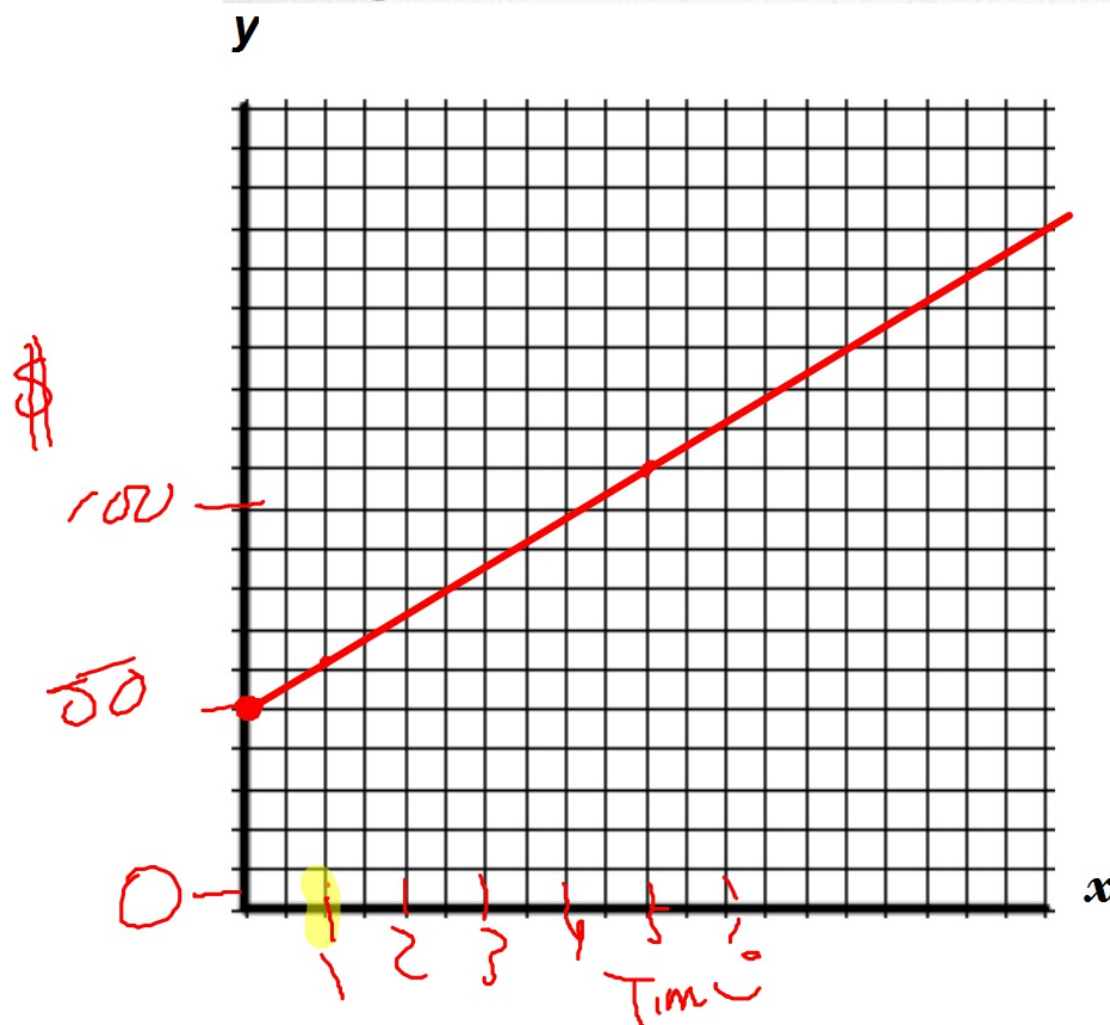
$$y = 12x$$

IWBAT model a salary that includes a starting bonus, understand the y-intercept in a linear equation, use piece-wise functions to model changes in salary, and explore the graphing function of a graphing calculator.

2.4 Linear Equations and Wages

4/10/15

Suppose you are given a \$50 signing bonus at the boutique in addition to your \$12 an hour wage. ~~You will now fill in a table for this situation, where x is the number of hours~~

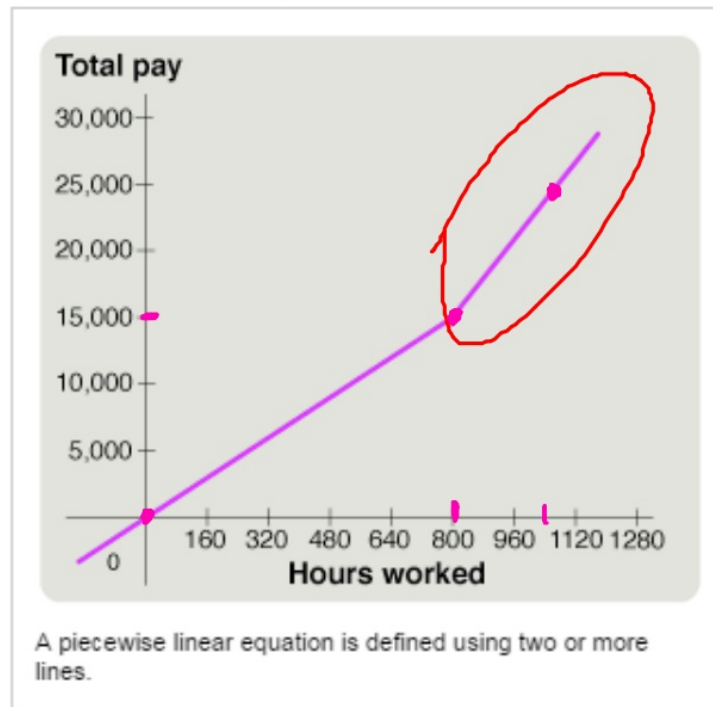


$$\begin{aligned} b &= 50 \\ m &= 12 \\ y &= 12x + 50 \end{aligned}$$

IWBAT model a salary that includes a starting bonus, understand the y-intercept in a linear equation, use piece-wise functions to model changes in salary, and explore the graphing function of a graphing calculator.

2.4 Linear Equations and Wages

4/10/15



2.4.1 p. 11

a raise increases the slope
old wage $\frac{15000}{800} = \$18.75$

New wage $\frac{25000 - 15000}{1040 - 800}$

$$\frac{10000}{240} = \$41.60$$

piecewise
linear

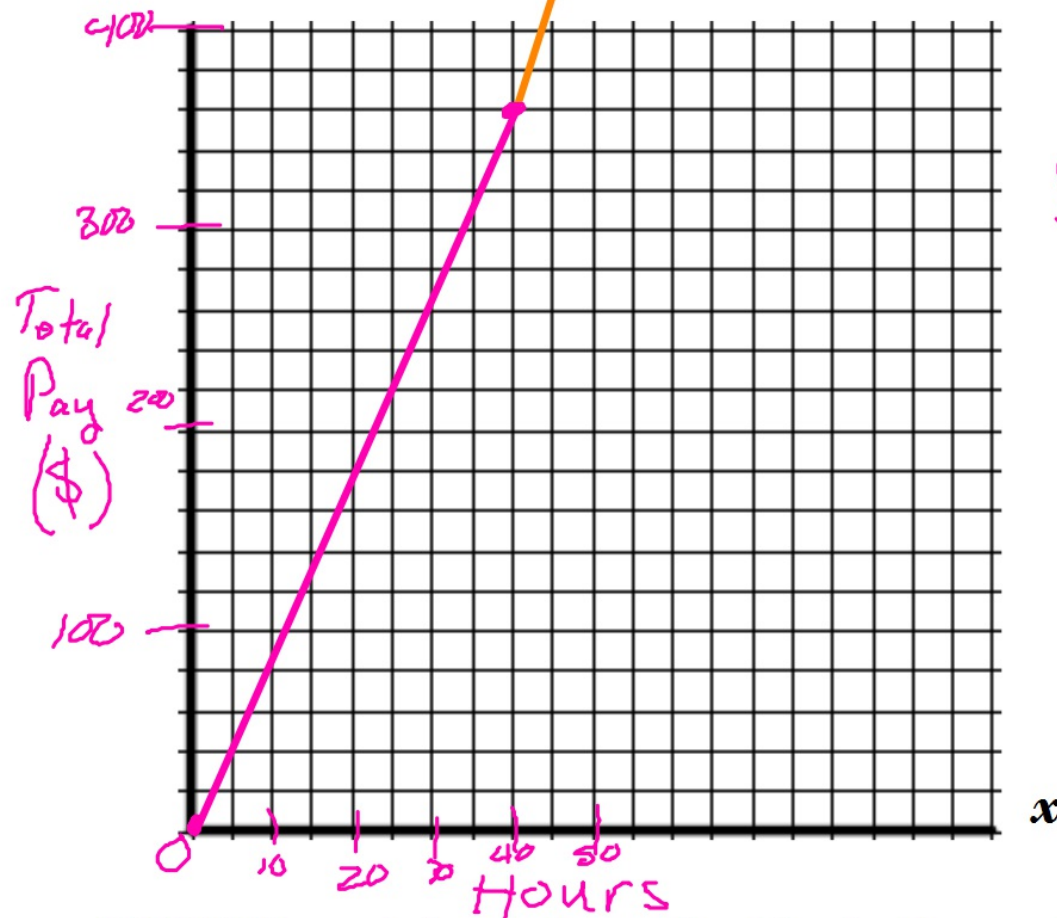
$$\begin{cases} y = 18.75x & x \leq 800 \\ y = 41.60x & x > 800 \end{cases}$$

IWBAT model a salary that includes a starting bonus, understand the y-intercept in a linear equation, use piece-wise functions to model changes in salary, and explore the graphing function of a graphing calculator.

2.4 Linear Equations and Wages

4/10/15

Johnny makes \$9 per hour for the first 40 hours he works each week and makes 1.5*regular for overtime. Graph his pay. Give the piecewise equations.



$$y = \begin{cases} 9x & 0 \leq x \leq 40 \\ 13.5(x-40) + 360 & x > 40 \end{cases}$$

IWBAT model a salary that includes a starting bonus, understand the y-intercept in a linear equation, use piece-wise functions to model changes in salary, and explore the graphing function of a graphing calculator.

2.4 Linear Equations and Wages

4/10/15

Vocabulary: Appendix A.3 Key Terms

Practice: 2.4.2

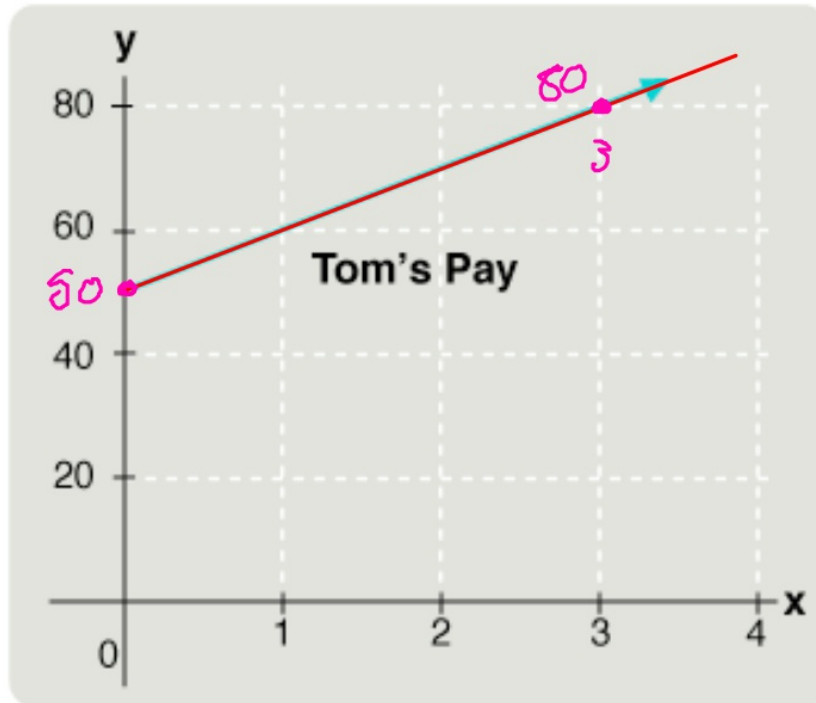
Quiz 2.4.3

IWBAT model a salary that includes a starting bonus, understand the y-intercept in a linear equation, use piece-wise functions to model changes in salary, and explore the graphing function of a graphing calculator.

2.5 Percentages and Commission

4/15/15

Given a graph, determine the employee's rate of pay and, if there was a bonus, the amount of that bonus.



bonus: 50
rate of pay: 10

$$\frac{80 - 50}{3} = 10$$

2.5 Percentages and Commission

4/15/15

What does it mean to be paid a commission?

paid a percentage of sales

Push money

*money you are paid to
sell a particular product*

2.5 Percentages and Commission

4/15/15

IWBAT

- understand graduated commission and base pay
- use percentages to compute a total commission.

I will capture my thinking using the math note catcher including teacher and student-team modeled example problems on the Promethean board. I will demonstrate my understanding on my exit ticket.

2.5 Percentages and Commission

4/15/15

Flat Commission (Piece Rate)

Same pay per item no matter the price of the item

Straight Commission

paid a percentage of the price of the product sold

IWBAT understand graduated commission and base pay, and use percentages to compute a total commission.

2.5 Percentages and Commission

4/15/15

Graduated Commission

| Amount Sold | Commission |
|-------------------|------------|
| Up to \$1000 | 10% |
| \$1000 - \$20,000 | 20% |
| Over \$20,000 | 25% |

\$50,000

$$1000 \times .10 = \$100$$

$$(2000 - 1000) \cdot .20 = \$200$$

$$(50000 - 2000) \cdot .25 = \$12250 +$$

$$\$11,400$$

IWBAT understand graduated commission and base pay, and use percentages to compute a total commission.

2.5 Percentages and Commission

4/15/15

Total Commission

$$C = p * r * n$$

Total commission = price of item sold * commission rate
* number of items sold

$$\$200 \times 10\% \times 20 = \$400$$

IWBAT understand graduated commission and base pay,
and use percentages to compute a total commission.

2.5 Percentages and Commission

4/15/15

Total Income

Total income = base pay + total commission

$$\begin{array}{rcccl} \$360 & + & \$400 & = & \$760 \\ (\$9/\text{hr} \times 40\text{hr}) & & (\$200 \times 10\% \times 20) & & \end{array}$$

IWBAT understand graduated commission and base pay, and use percentages to compute a total commission.

2.5 Percentages and Commission

4/15/15

Vocabulary: Appendix A.3 Key Terms

Practice: 2.5.2

Quiz 2.5.3

IWBAT understand graduated commission and base pay,
and use percentages to compute a total commission.

Calculate the commission for an employee.

John is an appliance salesman. His pay is based on commission only and is currently 22% for each appliance sold. Last month he sold 3 dishwashers for \$499 each, 2 freezers for \$399 each, and 1 stainless steel range for \$1299. Find the total commissions John earned last month.

$$\begin{array}{r} 3 \cdot 499 = 1497 \\ 2 \cdot 399 = 798 \\ + 1299 \\ \hline 3594 \cdot .22 = \$790.68 \end{array}$$

IWBAT

- Categorize budget expenditures/expenses

I will capture my thinking using the math note catcher including teacher and student-team modeled example problems on the Promethean board. I will demonstrate my understanding on my exit ticket.

Guidelines for budget exploration activity & record of decisions w/ reasoning

Budget Odyssey

Maria C & Dominique Q

| Choice | Reasoning | Correct choice? | Explanation |
|--------|------------------------------------|-----------------|--|
| Fixed | utilities are the same every month | no | electricity and water usage varies from month to month |

IWBAT categorize budget expenditures/expenses

Working with a partner, you will:

1. Proceed to <http://econedlink.org/i145> .
2. Play the game Budget Odyssey online.
3. Discuss all decisions with your partner.
4. Record all of your decisions and reasoning on the graphic organizer (more copies available if needed).
5. Continue playing until you can complete the game without any incorrect decisions.
6. Turn in your graphic organizer at the end of class or the successful conclusion of the game (whichever comes first).
7. Work on previously assigned work which remains incomplete. **Now is a good time to set up or update your budget spreadsheet, if you have not already done so.**

IWBAT categorize budget expenditures/expenses

**Turn in your completed
record of expenditure
categorizations w/ reasoning.**

IWBAT categorize budget expenditures/expenses

2.6 Required Paycheck Deductions

4/22/15

Categorize a set of budget expenditures/expenses

Student loan payment

Savings account interest

Mortgage payment

Renter's insurance

Purchase snow boots

Groceries

Paycheck

Tattoo

Diapers

Birthday money

Income

Paycheck

Birthday money

Savings account interest

Fixed expenses

Renter's insurance

Mortgage payment

Student loan payment

Variable expenses

Tattoo

Groceries

Diapers

Purchase snow boots

Birthday money

2.6 Required Paycheck Deductions

4/22/15

What kinds of things are found as deductions on a paycheck?

Taxes - Fed It, Soc Sec, Medicare, State, Local
Damages
Insurance
Retirement
Union dues
Charitable donations
Garnished wages
Uniform

Taxes

| Deduction |
|----------------------------|
| PENSION-COLORADO PERA |
| CITY OCCUPATIONAL HEAD TAX |
| STATE WITHHOLDING TAX |
| FEDERAL WITHHOLDING TAX |
| MEDICARE TAX - EMPLOYEE |

Company Taxes

| Deduction |
|---------------|
| PERA-EMPLOYER |

Pre-Tax Deductions

| Deduction |
|------------------------------|
| DELTA EXCLUSIVE PANEL PRETAX |
| CIGNA - HMO LOW - Pretax |
| VISION INSURANCE PRETAX |

After-Tax Deductions

| Deduction |
|--------------------------------|
| DEN CLASSROOM TCHRS ASSOC - FT |

Company Deductions

| Deduction |
|----------------------|
| CIGNA - HMO LOW - ER |

2.6 Required Paycheck Deductions

4/22/15

IWBAT

- understand which deductions are required on a paycheck
- calculate how each deduction is made
- work through examples where all deductions are taken into account.

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2.6 Required Paycheck Deductions

4/22/15

Gross income *your pay before deductions*

Net income *your pay after deductions*
"Take home pay"

Required deductions:

- Federal Income Tax
- State Income Tax
- Social Security
- Medicare

IWBAT understand which deductions are required on a paycheck, calculate how each deduction is made, and work through examples where all deductions are taken into account.

2.6 Required Paycheck Deductions

4/22/15

Federal Insurance Contributions Act (FICA)

FICA = Social Security + Medicare

Social Security: 6.2%

Medicare: 1.45%

$$FICA = 7.65\%$$

Pay periods:

- Annually
- Quarterly
- Monthly
- Semi-monthly
- Biweekly
- Weekly

Times paid per year:

- 1 Semi-annually 2
- 4
- 12
- 24
- 26
- 52

IWBAT understand which deductions are required on a paycheck, calculate how each deduction is made, and work through examples where all deductions are taken into account.

2.6 Required Paycheck Deductions

4/22/15

Johnny makes \$9 per hour for the first 40 hours he works each week. He is paid biweekly. How much is deducted from his paycheck for FICA?

$$\text{FICA} = 7.65\%$$

$$\$9 \times 40 \times 2 = \$720$$

$$\$720 \times .0765 = \$55.08$$

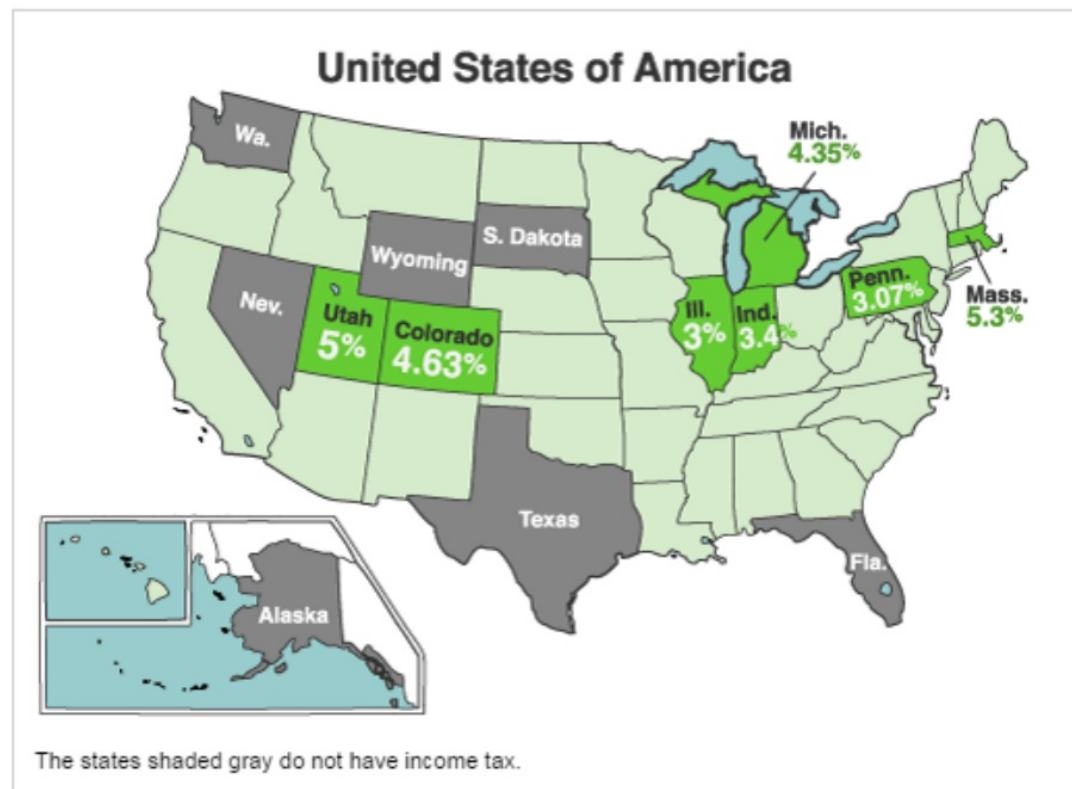
IWBAT understand which deductions are required on a paycheck, calculate how each deduction is made, and work through examples where all deductions are taken into account.

2.6 Required Paycheck Deductions

4/22/15

State Income Tax

- None - no tax on any income regardless of source
- Flat tax - *same % tax no matter your income level*



IWBAT understand which deductions are required on a paycheck, calculate how each deduction is made, and work through examples where all deductions are taken into account.

2.6 Required Paycheck Deductions

4/22/15

Income Tax

Progressive tax

Tax brackets

Single Taxpayers:

| If Taxable Income Is: | The Tax Is: |
|---------------------------------------|--|
| Not over \$9,075 | 10% of the taxable income |
| Over \$9,075 but not over \$36,900 | \$907.50 plus 15% of the excess over \$9,075 |
| Over \$36,900 but not over \$89,350 | \$5,081.25 plus 25% of the excess over \$36,900 |
| Over \$89,350 but not over \$186,350 | \$18,193.75 plus 28% of the excess over \$89,350 |
| Over \$186,350 but not over \$405,100 | \$45,353.75 plus 33% of the excess over \$186,350 |
| Over \$405,100 but not over \$406,750 | \$117,541.25 plus 35% of the excess over \$405,100 |
| Over \$406,750 | \$118,118.75 plus 39.6% of the excess over \$406,750 |

IWBAT understand which deductions are required on a paycheck, calculate how each deduction is made, and work through examples where all deductions are taken into account.

2.6 Required Paycheck Deductions

4/22/15

Vocabulary: Appendix A.3 Key Terms

Practice: 2.6.2

Quiz 2.6.3

IWBAT understand which deductions are required on a paycheck, calculate how each deduction is made, and work through examples where all deductions are taken into account.

2.7 Optional Paycheck Deductions

4/23/15

Imagine you are applying for a job that pays \$46,200 per year.
You live in New York, which has the following income tax brackets:

Single and married filing separately — filing status ① and ③.

| over | but not over | The tax is: | | | | | |
|---------|--------------|-------------|------|-------|--------------------|----------|--|
| \$ 0 | \$ 8,000 | | | | | | |
| 8,000 | 11,000 | \$320 | plus | 4.5% | of the excess over | \$ 8,000 | |
| 11,000 | 13,000 | 455 | plus | 5.25% | " " " " | 11,000 | |
| 13,000 | 20,000 | 560 | plus | 5.9% | " " " " | 13,000 | |
| 20,000 | 200,000 | 973 | plus | 6.85% | " " " " | 20,000 | |
| 200,000 | 500,000 | 13,303 | plus | 7.85% | " " " " | 200,000 | |
| 500,000 | | 36,853 | plus | 8.97% | " " " " | 500,000 | |

Your federal income tax rate is 22%. What is your net income after all required deductions?

$$\begin{array}{r}
 \$46,200 \\
 - 20,000 \\
 \hline
 \$26,200 \\
 \times .0685 \\
 \hline
 \$1,794.70 \\
 + 973.00 \\
 \hline
 \$2,767.70
 \end{array}$$

$$\text{FICA } 7.65\% \quad \$3534.30$$

$$\text{FIT } 22\% \quad \$10164.00$$

State

$$+ \$2767.70$$

$$\hline \$16466.00$$

$$\begin{array}{r}
 \$46,200 \\
 - 16,466 \\
 \hline
 \$29,734
 \end{array}$$

2.7 Optional Paycheck Deductions

4/23/15

Required

What kinds of deductions are optional?

Taxes - Fed It, Soc Sec, Medicare, State, Local
Damages Charitable donations
Insurance Garnished wages
Retirement Uniform
Union dues

Taxes

| Deduction |
|------------------------------------|
| PENSION-COLORADO PERA |
| CITY OCCUPATIONAL HEAD TAX |
| STATE WITHHOLDING TAX |
| FEDERAL WITHHOLDING TAX |
| MEDICARE TAX - EMPLOYEE |

Company Taxes

| Deduction |
|---------------|
| PERA-EMPLOYER |

Pre-Tax Deductions

| Deduction |
|------------------------------|
| DELTA EXCLUSIVE PANEL PRETAX |
| CIGNA - HMO LOW - Pretax |
| VISION INSURANCE PRETAX |

After-Tax Deductions

| Deduction |
|--------------------------------|
| DEN CLASSROOM TCHRS ASSOC - FT |

Company Deductions

| Deduction |
|----------------------|
| CIGNA - HMO LOW - ER |

IWBAT

- explore optional deductions such as health insurance, life insurance, disability, and retirement
- practice computing optional deductions
- understand which optional deductions reduce your taxable income.

I will capture my thinking using the math note catcher including teacher and student-team modeled example problems on the Promethean board. I will demonstrate my understanding on my exit ticket.

2.7 Optional Paycheck Deductions

4/23/15

Medical Insurance

Health Ins.

Vision Ins

Dental Ins.

IWBAT explore optional deductions such as health insurance, life insurance, disability, and retirement, practice computing optional deductions, and understand which optional deductions reduce your taxable income.

2.7 Optional Paycheck Deductions

4/23/15

Disability Insurance

Disability – loss of body part or function

Workman's Compensation
– workplace injury

Life Insurance – pays your survivors
in the event of your death

IWBAT explore optional deductions such as health insurance, life insurance, disability, and retirement, practice computing optional deductions, and understand which optional deductions reduce your taxable income.

2.7 Optional Paycheck Deductions

4/23/15

Retirement 401 K / 403 B - Defined Contribution
Pension - Defined Benefit

Pre-tax vs. Post-tax

Pre-tax deductions reduce your taxable income

IWBAT explore optional deductions such as health insurance, life insurance, disability, and retirement, practice computing optional deductions, and understand which optional deductions reduce your taxable income.

2.7 Optional Paycheck Deductions

4/23/15

Calculating Deductions

$$\text{deduction per paycheck} = \frac{\text{annual cost}}{\text{\# of paychecks}} * \% \text{ employee covers}$$

Ana
20%

Ana's employer covers 80% of the cost of a \$5700-per-year health insurance plan, and her share of the cost of the plan is her only optional deduction. How much is deducted from Ana's paycheck each month for health insurance?

$$\frac{\$5700 (.20)}{12} = \$95$$

IWBAT explore optional deductions such as health insurance, life insurance, disability, and retirement, practice computing optional deductions, and understand which optional deductions reduce your taxable income.

2.7 Optional Paycheck Deductions

4/23/15

Vocabulary: Appendix A.3 Key Terms

Practice: 2.7.2

Quiz 2.7.3

IWBAT explore optional deductions such as health insurance, life insurance, disability, and retirement, practice computing optional deductions, and understand which optional deductions reduce your taxable income.

2.8 Income and Career

4/24/15

Calculate an employee's monthly insurance deduction.

Braden's employer covers 70% of the cost of a \$5100-per-year health insurance plan, and Braden's share of the cost of the plan is his only optional deduction. How much is deducted from Braden's paycheck each month for health insurance?

$$\$5100 (.30) = \$1530$$

$$\frac{\$1530}{12 \text{ paychecks}} = \$127.50 \text{ per paycheck}$$

2.8 Income and Career

4/24/15

Explore various sources of income.

Employment
*being paid
to work for
someone else*

Pros:

Dependable income — you have a paycheck every week, every two weeks, or every month. The type of employment you can obtain is dependent on your education and experience — things you can control. You work regular hours — usually 35 to 40 each week.

Cons:

You are usually not in charge. Typically you do not get to make your own hours or choose what projects or tasks you must do. Your wages, hours, and level of responsibility are ultimately up to someone else.

Self-employment
Freelance

Business owner

| | Self-employed | Business owner |
|--------------|---|---|
| Differences | You are providing something that you are required to produce. | You own or run an entity that produces something. |
| | If you take time off, then you will not generate any income. | You can take time off and the business will still operate and generate revenue. |
| Similarities | You are your own boss. You must make all decisions. There are no taxes deducted from your gross income automatically. You must do this on your own. | |

Investment

*you buy into someone else's
company to make a profit*

IWBAT

- consider the relationship between income and career preparation
- explore correlations between income and a worker's skills, education, type of work, and the health of the economy.

I will capture my thinking using the math note catcher including teacher and student-team modeled example problems on the Promethean board. I will demonstrate my understanding on my exit ticket.

2.8 Income and Career

2/27/15

Education

2.8.1 p.7

Degrees

Associates AA, AS
2 yr

Bachelors BA, BS
4 yr, Assoc + 2 yr

Masters MA, MS
Bachelor + 2 yr

Doctoral

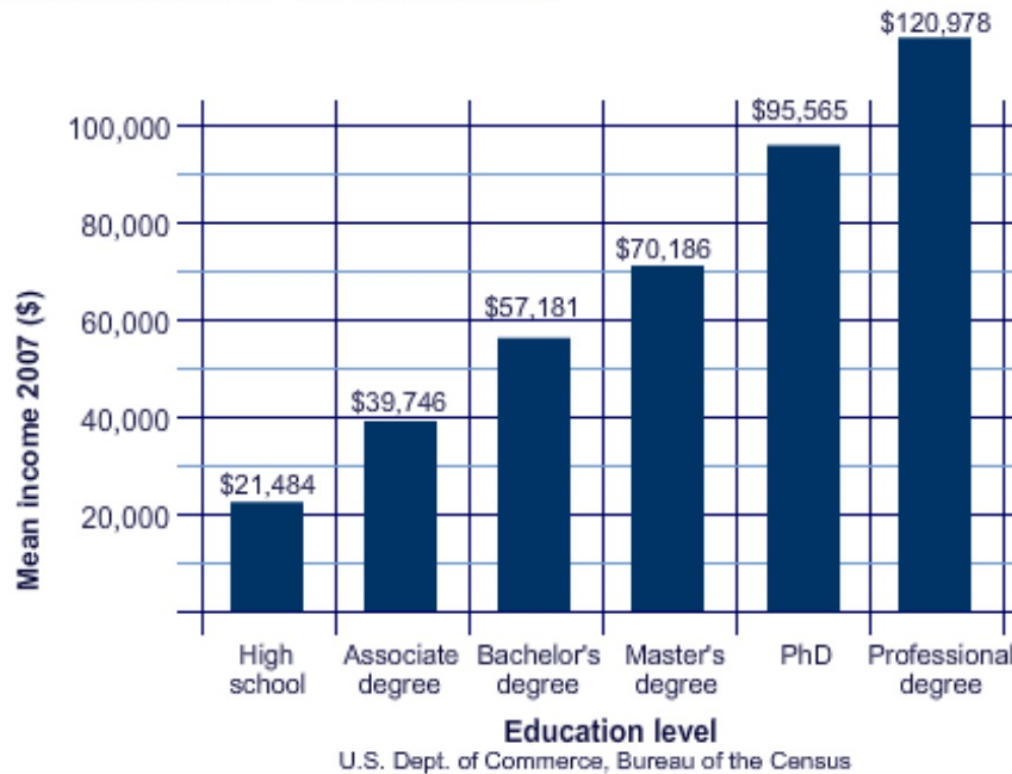
Certificate 3 mos → 18 mos
CNA, LPN
Hair tech.
Aesthetician

Professional

IWBAT consider the relationship between income and career preparation, explore correlations between income and a worker's skills, education, type of work, and the health of the economy.

2.8 Income and Career Education & Income

4/24/15



IWBAT consider the relationship between income and career preparation, explore correlations between income and a worker's skills, education, type of work, and the health of the economy.

2.8 Income and Career Unemployment

4/27/15

$$\text{Unemployment} = \frac{\text{\# of workers willing and able to work but who are jobless}}{\text{total workers}}$$

To write this ratio as a percentage, you multiply its decimal form by 100.

$$\text{Unemployment rate (\%)} = \frac{\text{\# of workers willing and able to work but who are jobless}}{\text{total workers}} \bullet 100$$

Working with Unemployment Rates

This is a table of unemployment rates. For instance, by looking at the table, you can tell that in February of 2002, 5.7% of the population was unemployed.

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| 2000 | 4.0 | 4.1 | 4.0 | 3.8 | 4.0 | 4.0 | 4.0 | 4.1 | 3.9 | 3.9 | 3.9 | 3.9 |
| 2001 | 4.2 | 4.2 | 4.3 | 4.4 | 4.3 | 4.5 | 4.6 | 4.9 | 5.0 | 5.3 | 5.5 | 5.7 |
| 2002 | 5.7 | 5.7 | 5.7 | 5.9 | 5.8 | 5.9 | 5.8 | 5.7 | 5.7 | 5.7 | 5.9 | 6.0 |
| 2003 | 5.8 | 5.9 | 5.9 | 6.0 | 6.1 | 6.1 | 6.3 | 6.1 | 6.1 | 6.0 | 5.8 | 5.7 |
| 2004 | 5.7 | 5.6 | 5.8 | 5.6 | 5.6 | 5.6 | 5.6 | 5.4 | 5.4 | 5.5 | 5.4 | 5.4 |
| 2005 | 5.3 | 5.4 | 5.2 | 5.2 | 5.1 | 5.1 | 5.0 | 4.9 | 5.0 | 5.0 | 5.0 | 4.9 |
| 2006 | 4.7 | 4.8 | 4.7 | 4.7 | 4.6 | 4.6 | 4.6 | 4.7 | 4.5 | 4.4 | 4.5 | 4.4 |
| 2007 | 4.6 | 4.5 | 4.4 | 4.5 | 4.4 | 4.6 | 4.4 | 4.6 | 4.7 | 4.7 | 4.7 | 5.0 |
| 2008 | 5.0 | 4.8 | 5.1 | 5.0 | 5.4 | 5.5 | 5.4 | 6.1 | 6.2 | 6.6 | 6.9 | 7.4 |
| 2009 | 7.7 | 8.2 | 8.6 | 8.9 | 9.4 | 9.5 | 9.4 | 9.7 | 9.8 | 10.1 | 10.0 | 10.0 |
| 2010 | 9.7 | | | | | | | | | | | |

Data taken from Bureau of Labor Statistics

1. If there were 7.7 million people unemployed in December of 2007, how many millions of people were available to work?

IWBAT consider the relationship between income and career preparation, explore correlations between income and a worker's skills, education, type of work, and the health of the economy.

2.8 Income and Career

4/27/15

Okun's Law

$$\% \text{ change in GDP} = 3\% - 2 \cdot (\% \text{ change in unemployment}).$$

Types of unemployment

2.8.1 p.16

Structural — your skills are no longer in demand

Frictional — no good reason you don't have a job

Cyclical — follows a recession

Unemployment resistant careers

Doctors, nurses, medical, police, fire, executives for the gov't, teachers, water treatment safety inspectors,

IWBAT consider the relationship between income and career preparation, explore correlations between income and a worker's skills, education, type of work, and the health of the economy.

Vocabulary: Appendix A.3 Key Terms

Practice: 2.8.2

Quiz 2.8.3

IWBAT consider the relationship between income and career preparation, explore correlations between income and a worker's skills, education, type of work, and the health of the economy.

What possible careers are in your future?

Detective

Accountant

Chef

Teacher

IWBAT

- Explain that supply and demand are the primary factors in determining wages.
- Identify several specific factors that affect wage rates.
- Explore wage rates in their potential careers.

Analyze why wage rates in their states may differ from the national average wage for their career.

Procedure

1. Retrieve a computer.
2. Read page one of assignment.
3. Proceed to the URL at the top of page one.
4. Follow the directions on page two of the assignment.
(http://www.bls.gov/oes/current/oes_nat.htm)
5. Record your answers to section 4 questions #1-10.
6. Write a two sentence summary below "Conclusion" explaining
 - what you need to do over the next five years for your chosen career *OR*
 - why you now are looking into a different career other than the one chosen for this exploration.

IWBAT explain that supply and demand are the primary factors in determining wages, identify several specific factors that affect wage rates, and explore wage rates in their potential careers.

**Turn in your completed questionnaire
with explanation.**

IWBAT explain that supply and demand are the primary factors in determining wages, identify several specific factors that affect wage rates, and explore wage rates in their potential careers.

2.9 Cost of Living and Budget

4/29/15

In the country of Apexistan, 7% of the population was unemployed in September of 2007. If there were 147,000,000 people willing and able to work in Apexistan during that month, how many people were unemployed?

$$\frac{?}{147,000,000} \times 100 = \frac{7}{100}$$

$$\cancel{147,000,000} \times \frac{\text{Unemployed}}{\cancel{147,000,000}} = 0.07 \times 147,000,000$$

$$\text{Unemployed} = 10,290,000$$

2.9 Cost of Living and Budget

4/29/15

Compare income to the cost of living in various geographical areas. *CPI = Consumer Price Index*

| CPI | New York | Philadelphia | Los Angeles | Cleveland | Atlanta |
|----------------|----------|--------------|-------------|-----------|---------|
| Overall | 165 | 92 | 156 | 78 | 112 |
| Food | 142 | 106 | 113 | 106 | 100 |
| Housing | 203 | 56 | 235 | 27 | 134 |
| Utilities | 165 | 130 | 115 | 126 | 93 |
| Transportation | 120 | 117 | 108 | 106 | 104 |
| Health | 182 | 102 | 120 | 113 | 104 |
| Miscellaneous | 136 | 112 | 107 | 100 | 99 |

CPI Compares the cost in a locality with the average cost for the nation (100).

IWBAT

- analyze how economic conditions affect income
- explore various types of monthly expenditures.

I will capture my thinking using the math note catcher including teacher and student-team modeled example problems on the Promethean board. I will demonstrate my understanding on my exit ticket.

2.9 Cost of Living and Budget

4/29/15

Standard of living How well you are doing compared to the average for your area

For the same income

CPI ↑ higher
↓ lower

Standard of Living ↓
↑

Budget How much you can spend in a month

housing

Utilities

food

Clothing

medicine

Insurances

debts (loans, credit cards)

memberships

gasoline

entertainment

Emergency fund

Dining out

Cleaning

Vehicle Maint.

toiletries

yard+house maint.

Income

IWBAT analyze how economic conditions affect income and explore various types of monthly expenditures.

2.9 Cost of Living and Budget

4/29/15

Budget items

\$36,000 salary

Housing

one week's pay
25% for monthly payment

\$692.30 /wk

Utilities

turn off the lights, water
Unplug electronics Full loads to wash
replace light bulbs w/CFL or LED

Turn down
the
thermostat

Groceries

Warehouse club
Coupons Sales
Savings club
Dollar stores

Other expenses

Sales/clearance
end of season
thrift stores

IWBAT analyze how economic conditions affect income
and explore various types of monthly expenditures.

2.9 Cost of Living and Budget

4/29/15

Vocabulary: Appendix A.3 Key Terms

Practice: 2.9.2

Quiz 2.9.3

IWBAT analyze how economic conditions affect income and explore various types of monthly expenditures.

2.10 Cost of Living and Budget Review

4/30/15

Create formulas in spreadsheet

2.10 Cost of Living and Budget Review

4/30/15

Create a Chart/Graph in spreadsheet

2.10 Cost of Living and Budget Review

05/01/15

Create a Chart/Graph in spreadsheet

E-mail or Share (Google Docs):

mmelosh@dpsk12.net

IWBAT

- review for my unit test.

I will capture my thinking using the math note catcher including teacher and student-team modeled example problems on the Promethean board. I will demonstrate my understanding on my exit ticket.

2.10 Cost of Living and Budget Review

05/01/15

Key vocabulary

2.1 Hourly wage, salary

2.2 Total compensation

2.3 Piece rate

2.4 Slope, intercept, piece-wise linear

2.5 Percentage, commission, graduated commission, total commission

2.6 Deductions, FICA, gross income, net income, flat tax, progressive tax, tax brackets

2.7 Pre-tax vs. post-tax

2.8 Unemployment rate, structural unemployment, frictional unemployment, cyclical unemployment

2.9 Cost of living, standard of living, budget

As a class, complete a definition of each key term (26 total).

IWBAT review for my unit test.

2.10 Cost of Living and Budget Review

05/01/15

Key skills

2.1 Converting from salary to hourly wage and from hourly wage to salary

2.2 Calculate total compensation

2.3 Convert piece rate to hourly wage

2.4 Express hourly wage and starting bonus as linear equation, express overtime as a set of piece-wise linear equations

2.5 Calculate total commission

2.6 Calculate required deductions

2.7 Calculate per paycheck deductions for optional deductions

2.8 Calculate number of unemployed and number of available workers via the unemployment rate equation

As a class, complete an explanation of each key skill (11 total).

IWBAT review for my unit test.

Turn in Practice Problems 2.10.2

Paper test 2.10.5 #1-5

IWBAT demonstrate proficiency on my unit test.